

# THE UNITED STATES OF AMERICA

Haibersity of Georgia Research Houndation, Inc.

There has been presented to the

### Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT (S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT (S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLEMISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE MIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR PORTUGE IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT USES BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT, COMMON

'USG 3295'

In Vestimonn Therest, I have hereunto set my hand and caused the seal of the Hunt Haristy Frotestion Office to be affixed at the City of Washington, D.C. this seventh day of April, in the year two thousand and eight.

Altast.

Berger

Commissioner Plant Variety Protection Office Agricultural Marketing Service Moved T. Schaffy Spriculture

GENERAL INSTRUCTIONS: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E, F; (3) for a tuber reproduced variety, verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; and (4) payment by credit card or check drawn on a U.S. bank for \$4,382 (\$518 filling fee and \$3,864 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice). NEW: With the application for a seed reproduced variety or by direct deposit soon after filling, the applicant must provide at least 3,000 viable untreated seeds of the variety per se, and for a hybrid variety at least 3,000 untreated seeds of each line necessary to reproduce the variety. Partial applications will be held in the PVPO for not more than 90 days; then returned to the applicant as un-filed. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a payment by credit card or check payable to "Treasurer of the United States" in the amount of \$768 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

**NOTES:** It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

**Plant Variety Protection Office** 

Telephone: (301) 504-5518 FAX: (301) 504-5291

General E-mail: PVPOmail@usda.gov

Homepage: http://www.ams.usda.gov/science/pvpo/PVPindex.htm

#### SPECIFIC INSTRUCTIONS:

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and **provide evidence** that the permanent name of the application variety (even if it is a parental, inbred line) has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: U.S. Department of Agriculture, Agricultural Marketing Service, Livestock and Seed Programs, **Seed Regulatory and Testing Branch**, 801 Summit Crossing Place, Suite C, Gastonia, North Carolina 28054-2193 Telephone: (704) 810-8870. http://www.ams.usda.gov/lsg/seed.htm.

#### ITEM

19a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;

(2) the details of subsequent stages of selection and multiplication;

(3) evidence of uniformity and stability; and

- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
  - (1) identify these varieties and state all differences objectively;
  - (2) attach replicated statistical data for characters expressed numerically and demonstrate that these are clear differences; and
  - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.

19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.

- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 20. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

#### N/a

23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

#### N/a

24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

#### N/a

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

Exhibit A

#### Origin and Breeding History of 951395-3E25

951395-3E25 winter wheat (Triticum aestivum L.), was developed and released by the Georgia Agricultural Experiment Stations in 2006. 951395-3E25 was derived from the cross, GA 87110 / VA93-52-55// GA 88151. The pedigree of GA 87110 is GA-Andy / GA-Gore; VA 93-52-55 is MASSEY\*3/BALKAN//SALUDA; and GA 88151 is Hunter // FengKang 7 / GA-Gore.

The cross of 951395-3E25 was made in the spring of 1995. The F1 was grown during the spring of 1996. The population was advanced from the F2 through F5 generations using the pedigree method of breeding with individual spikes selected for resistance to leaf rust (caused by *Puccinia recondita* (Roberge ex Desmaz), stripe rust (caused by *Puccinia striiformis Westend*), powdery mildew (caused by *Erysiphe graminis DC*. f. sp. *tritici Em*. Marchal), and septoria nodorum blotch (caused by Stagonospora nodorum (Berk) Castellani & E.G. Germano). Spikes were harvested, threshed individually and planted in single 1 meter headrows and were advanced to the next generation during the F2:3-, F3:4-, and F4:5-derived lines at Plains, GA. 951395-3E25 is the F5:derived head row selected and advanced to Breeder Seed which was produced in the F10 generation.

951395-3E25 was evaluated as GA951395-3E25 for agronomic performance in nursery plots in 2002 and 2003, GA state trials at five locations from 2004 to 2005, and in the Uniform Eastern Soft Red Winter Wheat Nursery at about 30 locations in 2005.

An increase strip of 951395-3E25 was planted in 2004 from a small increase plot and was rogued thoroughly for aberrant types. Seeds from this increase strip was planted in an increase block (2 acres) of 951395-3E25 in 2005 at the Foundation Seed Farm and rogued to remove variants. Seed from this large block was used for Breeder Seed for 951395-3E25 in 2006. 951395-3E25 has been observed for 3 generations of reproduction and during seed increase period and is stable and uniform. The variant consists of less than 1 bearded head per 3000 heads, 1 taller head per 4,000 heads, 1 bronze head per 20,000 heads, and 1 early head per 5000 heads.

This Breeder seed of 951395-3E25 was provided to the Georgia Seed Development Commission and will be the source of future seed multiplications. Breeder seed of 951395-3E25 will be maintained by the Georgia Agricultural Experiment Station, University of Georgia-Griffin Campus, Griffin, GA 30223-1797.

50080002

#### **Novelty Statement**

951395-3E25 (USG 3295) is a soft red winter wheat, apically awnletted, and white chaffed. 951395-3E25 is most similar in appearance to 'AGS 2010'; however, 951395-3E25 is bluegreen in leaf color and brown-black in phenol test whereas AGS 2010 is green in leaf color and fawn in phenol test. 951395-3E25 is also similar in appearance to 'AGS 2031' (951395-3A31); however, 951395-3E25 is blue-green in leaf color whereas AGS 2031 is green in leaf color.

REPRODUCE LOCALLY. Include form number and date on all reproductions

Form Approved OMB NO 0581-0055

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 2.5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

parental status, religion, sexual orientation, genetic information, in an its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status,

To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD), USDA is

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705

OBJECTIVE DESCRIPTION OF VARIETY

Exhibit C

Wheat (Triticum spp.) NAME OF APPLICANT(S) University of TEMPORARY OR EXPERIMENTAL DESIGNATION VARIETY NAME Georgia Research GA951395-3E25 **USG 3295** Foundation, Inc. ADDRESS (Street and No. or RD No., City, State, Zip Code and Country) FOR OFFICIAL USE ONLY 627 Boyd Graduate Studies Research Center **PVPO NUMBER** Athens, GA 30602-7411 #20080000 PLEASE READ ALL INSTRUCTIONS CAREFULLY: Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in the first box (e.g., 0 9 9 or 0 9 ) when number is either 99 or less or 9 or less respectively. Data for quantitative plant characters should be based on a minimum of 100 plants. Comparative data should be determined from varieties entered in the same trial. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: . Please answer all questions for your variety; lack of response may delay progress of your application. 1. KIND: 2. VERNALIZATION: 2 1 1 = Common 1 = Spring 2 = Durum 2 = Winter 3 = Club 3 = Other (Specify) 4 = Other (Specify) 3. COLEOPTILE ANTHOCYANIN: 4. JUVENILE PLANT GROWTH: 1 3 1 = Absent 2 = Present 1 = Prostrate 2 = Semi-Erect 3 = Erect 5. PLANT COLOR: (boot stage) 6. FLAG LEAF: (boot stage) 1 = Yellow-Green 1 = Erect 2 = Recurved 3 2 = Green 3 = Blue-Green 2 = Twisted 1 = Not Twisted 1 = Wax Absent 2 = Wax Present 7. EAR EMERGENCE: 9 6 Number of Days (Average) Number of Days Earlier Than Same As AGS 2000 Number of Days Later Than \*Relative to a PVPO-Approved Commercial Variety Grown in the Same Trial

2 = Purple

8. ANTHER COLOR:

1 = Yellow

1

Same As	* *
cm Shorter Than <u>AGS 2000</u>	*
10. STEM:	
A. ANTHOCYANIN	D. INTERNODE
1 = Absent 2 = Present	1 = Hollow 2 = Semi-Solid 3 = Solid
	Number of Nodes
B. WAXY BLOOM	E. PEDUNCLE
2 1 = Absent 2 = Present	1 1 = Erect 2 = Recurved 3 = Semi-Erect  1 4 cm Length
C. HAIRINESS (last internode of rachis)	F. AURICLE
1 = Absent 2 = Present	Anthocyanin: 1 = Absent 2 = Present
	1 = Absent 2 = Present
11. HEAD: (At Maturity)	
A. DENSITY	C. CURVATURE
1 = Lax 2 = Middense (Laxidense) 3 = Dense	1 = Erect 2 = Inclined 3 = Recurved
B. SHAPE	D. AWNEDNESS
2 1 = Tapering 2 = Strap 3 = Clavate 4 = Other (Specify)	1 = Awnless 2 = Apically Awnletted 3 = Awnletted 4 = Awned
12. GLUMES: (At Maturity)	
A. COLOR	E. BEAK WIDTH
1 = White 2 = Tan 3 = Other (Specify)	1 = Narrow 2 = Medium 3 = Wide
B. SHOULDER	F. GLUME LENGTH
2 1 = Wanting 2 = Oblique 3 = Rounded 4 = Square 5 = Elevated 6 = Apiculate 7 = Other (Specify)	1 = Short (ca. 7 mm) 2 = Medium (ca. 8 mm) 3 = Long (ca. 9 mm)
C. SHOULDER WIDTH	G. WIDTH
1 = Narrow 2 = Medium 3 = Wide	1 = Narrow (ca. 3 mm) 2 = Medium (ca. 3.5 mm) 3 = Wide (ca. 4 mm)
D. BEAK	H. PUBESCENCE
1 = Obtuse 2 = Acute 3 = Acuminate	1 = Not Present 2 = Present

13. SE	ED:		Exhibit C (Whea Z008000 5
A.	SHAPE		E. COLOR
1	1 = Ovate 2 = Oval 3 = Elliptical		1 = White 2 = Amber 3 = Red 4 = Other (Specify)
8.	CHEEK		F. TEXTURE
1	1 = Rounded 2 = Angular		2 1 = Hard 2 = Soft 3 = Other (Specify)
C.	BRUSH		G. PHENOL REACTION (See Instructions)
1		1 = Not Collared 2 = Collared	1 = Ivory 4 = Dark Brown 2 = Fawn 5 = Black 3 = Light Brown
D. (	CREASE  1 = Width 60% or less of Kernel 2 = Width 80% or less of Kernel 3 = Width Nearly as Wide as Kernel		H. SEED WEIGHT  3 9 g/1000 Seed (whole number only)
1	1 = Depth 20% or less of Kernel 2 = Depth 35% or less of Kernel 3 = Depth 50% or less of Kernel		f. GERM SIZE  1 = Small 2 = Midsize 3 = Large
2 S S S S S S S S S S S S S S S S S S S	(0 = Not Tested  Stem Rust (Puccinia graminis f. sp. tritici)  Stripe Rust (Puccinia striiformis)  Tan Spot (Pyrenophora tritici-repentis)  Halo Spot (Selenophoma donacis)  Septoria nodorum (Glume Blotch)  Septoria avenae (Speckled Leaf Disease)  Septoria tritici (Speckled Leaf Blotch)  Scab (Fusarium spp.)  Black Point" (Kernel Smudge)  Barley Yellow Dwarf Virus (BYDV)  Soilborne Mosaic Virus (SBMV)  Wheat Yellow (Spindle Streak) Mosaic Virus  Wheat Streak Mosaic Virus (WSMV)  Other (Specify)		2 = Resistant 3 = Intermediate 4 = Tolerant)  2 Leaf Rust (Puccinia recondita f. sp. tritici) MCDS , KBBG , TCTD , TNRF Loose Smut (Ustilago tritici) TLGK , TLBJ , THBL  Flag Smut (Urocystis agropyri)  Common Bunt (Tilletla tritici or T. laevis)  Dwarf Bunt (Tilletla controversa)  Kamal Bunt (Tilletla indica)  2 Powdery Mildew (Erysiphe graminis f. sp. tritici)  "Snow Molds"  Common Root Rot (Fusarium, Cochliobolus and Bipolaris spp.)  Rhizoctonia Root Rot (Rhizoctonia solani)  Black Chaff (Xanthomonas campestris pv. translucens).  Bacterial Leaf Blight (Pseudomonas syringae pv. syringae)  Other (Specify)  Other (Specify)
<u> </u>	ther (Specify)		Other (Specify)
INSECT	T: (0 = Not Tested 1 = Susceptib		3 = Intermediate 4 = Tolerant)
<u> </u>	onging The Africa Marie Value		Y BIOTYPE (where needed)
	essian Fly (Mayetiola destructor) 6,0, E	,	Other (Specify)
$\Box$	em Sawfiy (Cephus spp.)	_	Other (Specify)
Ce	real Leaf Beetle (Oulema melanopa)	L	Other (Specify)

15.	INSE	ECT: (continued)	(0 = Not Tested	1 = Susceptible	2 = Resistant	==	<b>U U</b> 4 = Tole	U	UU	5	Exhibit C (wheat)
				PLEASE S	PECIFY BIOTYPE	(Where Needed)					
		Russian Aphid (Die	uraphis noxia)		Other	(Specify)					_
		Greenbug (Schiza)	phis graminum)		Other	(Specify)					•
		Aphids			Other	(Specify)					<del>.</del>

16. ADDITIONAL INFORMATION ON ANY ITEM ABOVE, OR GENERAL COMMENTS:

#### Exhibit D

#### Additional Description of 951395-3E25

951395-3E25 is a common soft red winter wheat, *Triticum aestivum* L. bred and developed by the University of Georgia, Georgia Agricultural Experiment Stations and developed by Jerry W. Johnson. 951395-3E25 is a medium maturing, high yielding, excellent test weight, apically awnletted wheat with resistance to current races of leaf rust, <u>Puccinia recondita</u> (Roberge ex Desmaz), and stripe rust, <u>Puccinia striiformis</u> Westend, resistant to powdery mildew, (<u>Erysiphe graminis</u> DC. f. sp. <u>tritici</u> Em. Marchal) and susceptible to biotypes (B, D, E, L) of Hessian flies, (<u>Mayetiola destructor</u> (Say). 951395-3E25 is resistant to leaf rust races, MCDS, KBBG, TCTD, TNRF, TLGK, TLBJ, and THBL.

Milling and baking quality characteristics of 951395-3E25 are rated as acceptable for soft red winter wheat use by the USDA-Soft Wheat Quality 1aboratory, Wooster, OH. Information on the milling and baking quality characteristics is also included in a quality report. Additional information is presented in attachment to the Exhibit.

#### **ATTACHMENT I**

# APPLICATION FOR APPROVAL OF \_ CULTIVARS X ASSOCIATE CULTIVARS

(Please check appropriate type of application)

- 1. Crop: Wheat
- 2. Experimental no. or name: GA 951395-3E25
- 3. Pedigree and history: GA 951395-3E25 is GA 87110 / VA93-52-55// GA 88151. The final cross was made in the spring of 1995. Individual spike selections were made in the F2 to F5 generations at Plains, GA. The pedigree method of breeding was used to advance the segregating populations. In 2001, a headrow was harvested for preliminary evaluations. Agronomic evaluations were conducted from 2004 to 2005 in the Small Grain State Performance Trials for Georgia. It was evaluated in 2005 in the Uniform Southern Wheat Nursery.
- 4. Description: GA 951395-3E25 is a medium-late maturing, white chaffed, short height line. Its maturity is similar to AGS 2000 with an average of 2 days later in Georgia and similar to Roane with an average of 1 day earlier in regional trials. It is susceptible to current biotypes of Hessian fly in Georgia and is resistant to races of leaf rust and stripe rust in Georgia.
- 5. Station(s) where developed: Griffin Campus
- 6. Participating scientist(s): Jerry Johnson and G. David Buntin
- 7. In what respect is the new cultivar superior to the cultivar now in use? <u>or</u> reasons for proposing release as an associate cultivar.

GA 951395-3E25 will be released as an Associate Cultivar due to its susceptibility to Hessian fly and good performance in the Uniform Eastern Wheat Nursery.

GA 951395-3E25 is a high-yielding, medium maturing, and good test weight soft red winter wheat line (Tables 1, 2, 4, 5 and 6). It is susceptible to current biotypes of Hessian Fly in Georgia (Table 8).

It is equal to AGS 2000 in grain yield and test weight in Georgia (Tables 1, 2, and 4).

It has better stripe rust resistance than Patton and better soil-borne virus resistance than Roane (Tables 3 and 7).

In the Uniform Eastern Trial during 2005, it ranked number 8 out of 43 entries for grain yield over 28 locations and yielded better than the two checks (Patton and Roane) (Table 6).

- 8. Method of propagation: Seed
- 9. Amount of breeder seed stocks available (if applicable): 20 bu.
- 10. Amount of foundation seed stocks available (if applicable): 1000 bushel in summer of 2006.
- 11. Amount of cutting or bud material available for vegetative propagated material for nursery distribution (if applicable):
- 12. Is there likely to be unusual difficulty encountered in the production of any class of seed stocks? Explain. No
- 13. Three suggested names for the cultivar: GA 951395-3E25
- 14. Name approved by plant cultivar and germplasm release committee: GA 951395-3E25
- 15. Form of intellectual property protection: Plant Variety Protection
- 16. Is a royalty assessment recommended: X Yes No

#### **RECOMMENDED BY:**

	В.
Originating Scientist	Department Head
	D
Assistant Dean	
	Chairperson, GAES Plant Cultivar and Germplasm Release Committee
Associate Dean for Resear	rch
APPROVED:	
•	
, 	
	Dean and Director
	College of Agricultural & Environmental Scien

N

Table 1. Average Performance of GA 951395-3E25 and Checks in Elite Nursery Multilocations\*, 2003.

	Yield	Test Wt.	Head Date	Height
Entry	bu/A	lbs/bu	Julian	inches
GA 951395-3E25	73a	58a	102ab	35c
AGS 2000	69ab	56b	103a	38b
PIO 26R61	64b	58a	100b	40a

<sup>\*</sup> Plains, Griffin, Marianna and Quincy, FL, and Belle Mina, AL

Table 2. Average Performance of GA 951395-3E25 and Checks in Multi-State\* Performance Trials (GAWN), 2004.

111111111111111111111111111111111111111	Yield	Test Wt.	Head Date	Height
Entry	bu/A	lbs/bu	Julian	inches
GA 951395-3E25	70a	57a	104a	31b
AGS 2000	69a	58a	101b	34a
McCormick	72a	58b	105a	31b

<sup>\*</sup>Florida, Georgia, Arkansas, Louisiana, Virginia

Table 3. Average Agronomic Traits of GA 951395-3E25 and Checks in Multi-State\* Performance Trials (GAWN), 2004.

	Lodging	P. Mildew	Leaf Rust	Stripe Rust
Entry	0-9	0-9	0-9	0-9
GA 951395-3E25	0.0a	2.0b	0.0a	0.8b
AGS 2000	1.4a	4.0a	0.3a	3.0a
McCormick	0.9a	3.0ab	0.4a	1.1b

<sup>\*</sup>Florida, Georgia, Arkansas, Louisiana, Virginia

Table 4. Average Performance of GA 951395-3E25 and Checks in Georgia's State Performance Trials in Georgia, 2-Yr Ave. 2004-2005.

Entry	Yield	Test Wt.	Head Date	Height
	bu/A	lbs/bu	Julian	inches
GA 951395-3E25	91.3b	58a	96a	36b
AGS 2000	97.5a	59a	93b	40a
PIO 26R61	88.9b	59a	95ab	41a

Table 5. Average Performance of GA 951395-3E25 and Checks in State Elite Nursery at 3 locations

in Georgia, 2-Yr Ave. 2004-2005.

Entry	Yield	Test Wt.	Head Date Julian	Height inches
	bu/A	lbs/bu		
GA 951395-3E25	92.0a	58a	93a	30c
AGS 2000	87.5a	58a	93a	34b
PIO 26R61	88.9a	59a	91a	38a

Plains, Griffin, Calhoun

Table 6. Average Performance of GA 951395-3E25 and Checks in Uniform Eastern Soft Red Winter Nurserv. 2005

14u1sery, 2005.	Yield	Test Wt.	Head Date	Height
Entry	bu/A	lbs/bu	Julian	inches
GA 951395-3E25	82.5a	60a	136a	33b
Patton	74.8b	59a	135a	37a
Roane	77.7b	60a	137a	33b

28 locations in the Eastern Region

Table 7. Average Agronomic Traits of GA 951395-3E25 and Checks in Uniform Eastern Soft Red Winter Nursery 2005

Entry	Soil-Borne Virus	Leaf Rust 0-9	Stripe Rust 0-9	P. Mildew 0-9
	0-9			
GA 951395-3E25	1b	0.5a	1.4b	0.9a
Patton	2b	1.8a	5.4a	2.1a
Roane	5a	2.0a	2.5b	1.6a

28 locations in the Eastern Region

Table 8. Evaluation of lines to biotypes of Hessian Fly, USDA-ARS Lab, Purdue University, 2005.

Enter	Biotype B R:S	Biotype D R:S	Biotype E R:S	Biotype L R:S
Entry GA 951395-3E25	0-16	0-14	0-14	0-15
Patton	13-2	13-2	15-2	0-15
Roane	13-2	0-17	16-1	0-14

## **LEAF RUST**

#### Blacksburg VA

		VA
		Griffey
		LR05 TNRJ
1	Caldwell	3S
2	Foster	;1
3	Patton	;1
4	Roane	3S
5	MO980829	3S
6	T141	23;
7	AR 93027-3-2	3;
8	MV 5-46	;1
9	MSU Line E1007	3S
10	IL99-15867	;1
11	OH751	3S
12	M00-3701	3S
13	X00-1079	3S
14	96229-3E39	000000000000000000000000000000000000000
15	961395-3E25	0;
00000000000000000		0;
16	B990081	23
17	B990133	23
18	B990399	;1
19	MSU Line D8006-R	38
20	AR 850-1-1	3S
21	M01-4377	38
22	M01*1019	23
23	Y00*3067	23
24	X00-1056	3S
25	93C-0004-22-1	38
26	97C-0232-2	23
27	VA02W-398	38
28	VA02W-513	;1=
29	VA02W-555	0;
30	Nomad exp.	;12
31	Samco exp.	23;
32	Bingo exp.	3;
33	97397J1-4-1-4-7	;1/23
34	97462A1-21-1-5-2	;1/3S
35	981312A1-6-2-2	2;
36	T148	2, 3S
37	OH776	23
38	OH768	000000000000000000000000000000000000000
200000000000000000000000000000000000000		3S/0;
39	IL99-26442	38
40	IL00-8061	3S
41	G20412	38
42	G20536	3S/TR;1
//2	GOUNGS	

	LR gene	LR05 TNRJ
Lr differential	Tc Lr1	3S
Lr differential	Tc Lr2a	23
Lr differential	Tc Lr2c	2C
Lr differential	Tc Lr3a	3S
Lr differential	Tc Lr9	3S
Lr differential	Tc Lr16	12=C
Lr differential	Tc Lr24	3S
Lr differential	Tc Lr26	;1
Lr differential	Tc Lr3ka	3S
Lr differential	Tc Lr11	3S/0
Lr differential	Tc Lr17	;12
Lr differential	Tc Lr30	3S
Lr differential	Tc Lr18	;1
Lr differential	Tc Lr14a	38
Lr differential	Tc Lr10	3S
Lr differential	Tc LrB	;12

#### **LEAF RUST**

St. Paul MN

					Long							
						•	iced by NA					Postulated
2000, 2000, 2	A	BBDB	NBBK	KDBG	KGBJ	MCRK	MLDS	TBBF	TLGJ	TNRJ	MCDS	Genes***
1	Caldwell	3	3	3	;1c	3	3	3	- 3	3	3	14a
2	Foster			;2c	;2c3	3	;1c		;-3	3∹;	;-3	11,26
3	Patton	i	;1c	;2c3	;1c2	3	;1c	÷	;-3	;1c	i	26
4	Roane	;-3	;-3	;1c2	;	;	3	3	;-3	;-3	;	+
5	MO980829	3	3	;2c3	;2c3	3	3	3	3 :	3	3	0
6	T141	;-3	3	3-;1c	;-3	3-;	3	3	3-;	;31c	;-3	0
7	AR 93027-3-2	i,	· ;	3	3		÷	;3	3	3	-	2a,+
8	MV 5-46	;1c	;	;1c2	;	:	2c;	;	;	;2c	;	+
9	MSU Line E1007	i	i		;	3	2c;	;1c3	3	- 3	;3	11,+
10	IL99-15867	i	;	•	:	;1c2	3	i	;	;1c	3	17
11	OH751	i	,	,	,	i	3	ï	3	3	- 1	9
12	M00-3701	•	·	3	3	;	;2	;	3	3	•	2a,+
13	X00-1079		;	;			;1c-3	;1c	3	3		2a,9
14	96229-3E39	1	•			;	;1c	:	;	;1c	;	+
15	961395-3E25	•		;1c	,	÷	,	,		;1c		+
16	B990081	31c;	31c;	;1c		3-;	3;	3	3;	;1c1	;1c3	1
17	B990133						3		3;	3		9
18	B990399	;1c	•	;1c2	;1c2		;1c	:	:	1c;2	;-3	+
19	MSU Line D8006-R	;	;1c	* 1	,	3	3	3	3	3	3	1,3
20	AR 850-1-1		;1c2	;1c1	•	;-3	;1c	;1c2	3;	3	3;	+
21	M01-4377	3	3	;2c	;1c	3	3;	3	3	3	3	14a
22	M01*1019	3	3	;2c	1;2	3	3	3	3	3	3	14a
23	Y00*3067	, r	3-;	;1c3	;3	3	3	3	3	3	3	1
24	X00-1056	, 1	3	3	3	3	3	3	-	3	3	0
25	93C-0004-22-1		2	;1c	;1c	3	;				,	18,26
26	97C-0232-2		3	;2	;1c2	3	;1c-3	;	;-3	;-3	;	18
27	VA02W-398	;		ï		÷	3;	÷	÷	,	;	9,17
28	VA02W-513	,	;	i	;	;-3	;1c	;	;	i	,	+
29	VA02W-555	i	i	i	į.	31c;	;1c		;	• 1		18,26
30	Nomad exp.		;	;1¢2	;1c1	3	;1c	•	;	3;	;2c3	11,26
31	Samco exp.	;	;		,	j	;1c	;1c	,1c	1	i	+
32	Bingo exp.	;	;	;1c1	;3	;	;1c	;-3	;-3	;	;1c2	+
33	97397J1-4-1-4-7	- ;	;	;1c	;	;		i	i	;1c	;1c2	+
34	97462A1-21-1-5-2	;	;	;1c	;	3	;1c	;		;1c	;1c2	18,26
35	981312A1-6-2-2	,	i		_	;1c	;1c				;1c	+
. 36	T148	3	3	3	3	-	3	3	3	-	3	0
37	OH776	ì	-	;	· i	:=	3;	j	3	;1c2	-	9,+
38	OH768	<u>i</u>	i		;-3	;	3-;	3;	3;	3;	3	17,+
39	IL99-26442	i	;1	3	3	÷	;-3	3	3	3		2a,+
40	IL00-8061		3			3	3	3	3	<del>-</del>	3	1,+
41	G20412	; :	3	2c3;	;1c23	3	3	3	3	3	3	1,+
42	G20536		3		;1c	3	3	3	;-3	3	;2c3	1
43	G20433	i	3	2c3;	;3	;-3	3	3	3	3	3	14a

<sup>\*</sup>Single genes tested: = 1,2a,2c,3,3Ka,9,10,11,14a,16,17,18,24,26,30,B

BBDB=14a

NBBK=1,2c,10,14a,18 KDBG=2a,2c,3,10,24 KGBJ=2a,2c,3,10,14a,16 MCRK=1,3,3ka,10,11,14a,18,26,30 MLDS=1,3,9,10,14a,17,B TBBF=1,2a,2c,3,14a,18 TLGJ=1,2a,2c,3,9,10,11,14a TNRJ=1,2a,2c,3,3ka,9,10,11,14a,24,30 MCDS=1,3,10,14a,17,26,B

<sup>\*\*</sup>Virulence formula:

<sup>\*\*\*+=</sup>Lr gene(s) present but unable to identify with these Lr virulence combinations
Note: MCRK, MCDS, and TNRJ were the most commonly races identified in the US in 2004.

## **STEM RUST**

St. Paul MN Yue Jin

		Co.	edling Reaction	~~		٨٨	ult Field Read	rtion
	048/81 04 8 4 2		eding Reaction 03ND76C		00/2764 1		Infection	winter kill
	01MN 84A-1-2			77ND82A RCRS	99KS76A-1	Severity		WIIREI KIII %
1 Caldwell	TTTT S	TPMK 2+/S	QFCS	KUKS S	RKQQ S	40	response MS-S	60
			2-		ی 1+	Service Programme in a population	R-MR	90
2 Foster	2-	2	2-	0;1		5	CONTRACTOR	<ul> <li>Fig. 2 to 100 (20000000 2000 1000 1000)</li> </ul>
3 Patton	;1	2	2/S	0;/S	2/S	20	MS	70 00
4 Roane	S/;1	S	S	S	S	60	MS-S	60
5 MO980829	S	S	S	S	S	60	S	80
6 T141	2	S	1	2	2	5	R-MR	50
7 AR 93027-3-2	S	2	2-	S	S	30	MR-MS	70
8 MV 5-46	1+	2-	2-	;1/S	2	TR	ssamentuse_c_v_v_t	99
9 MSU Line E1007	S	S	S	S	S	50	S	80
10 IL99-15867	S	2	2	S	2C	10	S	90
11 OH751	S	S	0;	S	S	5	MS	95
12 M00-3701	S	2	2	S	S	20	MS	95
13 X00-1079	S	S	S	S	S	70	S	90
14 96229-3E39	S	S	<b>. ;</b>	S	1			100
15 961395-3E25	;1	;1	0	0;	;			100
16 B990081	S	S	S	;23	S			100
17 B990133	S	S	;	S	S			100
18 B990399	2-	2	1+	1	1+	5	R-MR	80
19 MSU Line D8006-R	-	S	S	0	0	20	MS	80
20 AR 850-1-1	S	S	2+	S	S	30	S	30
21 M01-4377	S	S	S	S	S	30	S	100
22 M01*1019	S	;	0	;	S		5.5.5.000 5.400	100
23 Y00*3067	S	S	S	S	S	60	S	80
24 X00-1056	S S	S	S	S		60	S	70
25 93C-0004-22-1	-	S/2	S	S	S	50	S	90
26 97C-0232-2	0/S	;1	S	0	S	20	MS	90
27 VA02W-398	S	S	;1	S	S			99
28 VA02W-513	0;/S	S	0;	S	S	10	S	99
29 VA02W-555	Ó;	0;	0	0;/1	0/;			100
30 Nomad exp.	2-	2	;1	1	0;	8008888-700-1-100-00		100
31 Samco exp.	- S	S	1.	S	S	40	S	60
32 Bingo exp.	-	1	1+	1/S	1	5	R	80
33 97397J1-4-1-4-7	O	0/2	0	0	0;	ő		90
34 97462A1-21-1-5-2	0;1	-	·	0;/S	1			100
35 981312A1-6-2-2	Š	2	, 1N	S	S	30	S	95
36 T148	S	S	S	an in the same and the same and the consistence	S	30	MS	90
37 OH776	S	S	S	S S	S	in contra interestance i grain to		98
38 OH768	- -	S	s S	ಲ		40 40	S S	96 95
39 IL99-26442	S	2-	2	-	S S	Color Reserves the top	A RESIDENCE OF REPORT OF A SECOND RESIDENCE OF THE PARTY	constructed from the first transfer of the
40 IL00-8061				S	Contract Con	60	S	50 70
41 G20412	S S	S	S	S	S	80	S	70 70
		2+	2	S	S	40 50	MS-S	70
<ul> <li>A contract of the contract of the</li></ul>	S S	-	S	S	S	50 50	S	99
43 G20433	ა გ	2/S	2	S	S	50	MS	40

DATE 1/27/2005 1/27/05 2/28/2005 3/1/2005 3/1/2005

<sup>&</sup>quot;/" indicates a mixture of plants, predominant type listed first. "S" indicate susceptible, including infection types 3 or 4. Bulk of races for field inoculation: MCCF, QFCS, QTHJ, RCRS, RKQQ, TPMK, TTTT.

# STRIPE RUST

		Bay AR		Fayetteville AR		Quincy FL	Griffin GA
		Hancock		Milus		Barnett	Johnson
		1-9	. %	%	total leaf area	0-9	
1	Caldwell	9.0	15	50	93	3	1
2	Foster	9.0	30	50	98	4	5
3	Patton	9.0	15	50	98	4	6
4	Roane	5.3	2	7	50	3	2
5	MO980829	2.7	0	0	50	1	1
6	T141	2.3	0	0,50	30	1	0
7	AR 93027-3-2	7.0	2	15	93	4	2
8	MV 5-46	9.0	7	30	98	3	2
9	MSU Line E1007	9,0	2	15	93	1	5
10	IL99-15867	8.7	, 7	30	93	2	3
11	OH751	9.0	2	15	93	1	
12	M00-3701	3.3	0	0	70	. 1	0
13	X00-1079	4.7	0	7	85	0	3
14	96229-3E39	3.0	0	0	30	0	0
15	961395-3E25	2.3	0	0	70	0	2
16	B990081	6.0	0	2	50	0	1
17		3.7	0	0	30	0	0
18	B990399	4.0	2	0	50	0	2
19	MSU Line D8006-R	4.7	2	2	70	0	1
20	AR 850-1-1	2.3	0	0	30	0	0
21	M01-4377	2.7	0	0	30	0	0
22	M01*1019	4.3	0	0	50	0	0
23	Y00*3067	9.0	7	50	98	2	5
24	X00-1056	5.7	0	2	50	2	1
25	93C-0004-22-1	3.3	0	0	30	1	1
26	97C-0232-2	3.7	0	0	30	0	0
27	VA02W-398	8.7	7	15	93	2	3
28	VA02W-513	5.3	0	0	50	1	2
07.00000.000000	VA02W-555	3.0	0	0	30	0	0
30	Nomad exp.	9.0	30	70	98	1	5
31	Samco exp.	3.0	0	0	50	0	0
32	Bingo exp.	9.0	30	50	98	2	3
1 11111 11 11 11	97397J1-4-1-4-7	8.0	7	15	85	2	3
34	97462A1-21-1-5-2	9.0	30	70	93	5	8
35	981312A1-6-2-2	5,0	7	7	50	1	2
36	T148	3.3	0	0	50	1	0
37	OH776	7.7	2	7	70	0	2
38	OH768	7.7	15	30	85	2	3
2.0000000000000000000000000000000000000	IL99-26442	3,3	0	0	30	1	0
40	IL00-8061	5.3	2	15	93	<b>1</b> 	2
41	G20412	3.3	2	7_	85	3	1
42	G20536	3.7	15	15	85	<b>1</b>	0
43	G20433	9,0	50	70	98	1	8
LOCA	ATION MEANS	5.7	6.7		67.6	1.3	2.0
	WTH STAGE / DATE		April 27	May 4	May 19	April 6	<del>-</del>

# **POWDERY MILDEW**

## Blacksburg VA

Griffey

		PM05 Comp
1	Caldwell	34
2	Foster	0
3	Patton	01/4
4	Roane	4
5	MO980829	4
6	T141	0/TR4
7	AR 93027-3-2	4
8	MV 5-46	23
9	MSU Line E1007	34
10	IL99-15867	4
11	OH751	34
12	M00-3701	01/4
13	X00-1079	4
14	96229-3E39	0/TR4
15	961395-3E25	0
16	B990081	4
17	B990133 B990399	4
18 19	MSU Line D8006-R	34 23
20	AR 850-1-1	20 4
21	M01-4377	4
22	M01*1019	4
23	Y00*3067	4
24	X00-1056	3
25	93C-0004-22-1	0/TR4
26	97C-0232-2	34
27	VA02W-398	23
28	VA02W-513	3
29	VA02W-555	34
30	Nomad exp.	4
31	Samco exp.	34
32	Bingo exp.	0/TR4
33	97397J1-4-1-4-7	4
34	97462A1-21-1-5-2	4
35	981312A1-6-2-2	4
36	T148	4
37	OH776	4
38	OH768	4
39	IL99-26442	4
40	IL00-8061	4
41	G20412	34
42	G20536	4
43	G20433	4

7			
		PM gene	PM05 Comp
Pm differential	Chancellor	Susc	4
Pm differential	Axminster	Pm 1	3
Pm differential	C68-15*7/CI 13836	Pm 1	3
Pm differential	Ulka	Pm 2	4
Pm differential	Asosan	Pm 3a	4
Pm differential	Chul	Pm 3b	1
Pm differential	Sonora*	Pm 3c	4
Pm differential	C68-15*6/Sonora	Pm 3c	4
Pm differential	C68-15*6/Trit	Pm 3c	34
Pm differential	Michigan Amber	Pm 3f	4
Pm differential	Yuma	Pm 4a	4
Pm differential	C68-15*5/Yuma	Pm 4a	4/1
Pm differential	C68-15*5/Kapli	Pm 4a	4/1
Pm differential	Ronos	Pm 4b	4
Pm differential	Hope	Pm 5	34
Pm differential	C747*	Pm 6	4
Pm differential	Transec*	Pm 7	4
Pm differential	C68-15*7/Transec	Pm 7	3
Pm differential	Federation/Kavkaz	Pm 8	12
Pm differential	Amigo	Pm 17	0
Pm differential	C68-15*5//747/Amigo	Pm 17	0

# **HESSIAN FLY**

W. Lafayette
IN
Cambron

			Cambron		
	Biotype B	Biotype C	Biotype D	Biotype E	Biotype L
1 Caldwell	12-5	0-19	0-16	16-0	0-18
2 Foster	0-14	0-17	0-14	0-17	0-17
3 Patton	13-2	13-4	13-2	15-2	0-15
4 Roane	13-2	12-4	0-17	16-1	0-14
5 MO980829	0-18	0-17	0-17	0-12	0-15
6 T141	1-14	0-19	0-16	2-12	0-16
7 AR 93027-3-2	20-1	0-20	0-17	17-0	0-14
8 MV 5-46	0-20	0-15	0-13	1-12	0-15
9 MSU Line E1007	0-15	11-6	0-16	18-0	0-18
10 IL99-15867	0-17	0-19	0-19	11-5	0-21
11 OH751	0-18	1-14	0-15	0-14	0-15
12 M00-3701	16-2	0-17	0-16	15-0	0-20
13 X00-1079	0-17	0-16	0-17	1-17	0-17
14 96229-3E39	13-3	17-0	12-4	14-0	0-18
15 961395-3E25	0-16	0-19	0-14	0-14	0-15
16 B990081	15-0	0-16	0-16	12-1	0-17
17 B990133	19-0	0-15	0-14	15-0	0-18
18 B990399	0-15	0-16	0-15	0-17	0-14
19 MSU Line D8006-R	0-14	0-17	0-11	2-8	0-13
20 AR 850-1-1	0-17	0-15	0-16	0-17	0-19
21 M01-4377	16-1	3-16	0-20	18-0	0-19
22 M01*1019	0-18	0-16	0-17	0-16	0-18
23 Y00*3067	18-0	13-2	0-12	13-0	0-15
24 X00-1056	0-19	0-16	0-15	0-11	0-18
25 93C-0004-22-1	0-18	0-12	0-16	2-17	0-16
26 97C-0232-2	0-19	0-15	0-15	0-12	0-15
27 VA02W-398	0-18	0-20	0-13	0-19	0-22
28 VA02W-513	0-17	0-16	0-16	5-11	0-14
29 VA02VV-555	0-18	0-19	0-15	0-19	0-20
30 Nomad exp.	0-13	0-19	0-11	0-10	0-16
31 Samco exp.	0-15	11-6	0-15	0-15	0-14
32 Bingo exp.	0-18	0-13	0-15	1-15	0-14
33 97397J1-4-1-4-7	17-0	15-0	10-0	11-0	0-16
34 97462A1-21-1-5-2	14-0	17-0	16-0	12-0	18-0
35 981312A1-6-2-2	0-18	4-11	0-14	0-10	0-16
36 T148	1-11	7-9	2-13	4-9	0-20
37 OH776	0-15	0-17	0-14	0-12	0-10
38 OH768	0-16	3-11	0-1 <del>4</del> 0-14	1-14	0-10
39 IL99-26442	14-1	0-16	0-15	18-0	0-20
40 IL00-8061	0-20	0-15	0-15 0-16	0-17	0-13
41 G20412	15-1	0-13	0-16	12-0	0-22
42 G20536	0-19	0-10 0-12	0-13 0-17	0-15	0-14
43 G20433	14-5			en anno anno anno anno anno anno anno an	
TO 020400	1#4*0	3-17	0-18	12-3	0-18

# ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

LAB NO.	Samples composited from West Lafayette IN, Columbia MO, Blacksburg VA	MILLING QUALITY SCORE		BAKING QUALITY SCORE		TEST WT. SCORE		SOFT. EQUIV. SCORE		MICRO T.W. LB/BU
	STANDARD (#2552, FOSTER)	84.3	Α	73.3	В	55.8	D	72.1	В	64.1
2551	1 Caldwell	79.7	В	84.3	Α	59.8	D	80.7	Α	64.6
2552	2 Foster	84.3	Α	73.3	В	55.8	D	72.1	В	64.1
2553	3 Patton	70.3	В	67.6	С	56.1	D	72.5	В	64.1
2554	4 Roane	64.2	С	45.3	Ε	66.6	С	77.3	В	65.4
2555	5 MO980829	68.9	С	84.3	Α	45.9	Ε	74.0	В	62.9
2556	6 T141	73.4	В	-3.0	F	55.4	D	26.4	F	64.0
2557	7 AR 93027-3-2	71.5	В	72.6	В	55.5	D	83.3	Α	64.0
2558	8 MV 5-46	65.9	С	64.3	С	59.6	D	74.5	В	64.5
2559	9 MSU Line E1007	75,2	В	87.0	Α	59.7	D	84.7	Α	64.5
2560	10 IL99-15867	73.9	В	81.3	Α	58.6	D	82.6	Α	64.4
2561	11 OH751	74.3	В	86.0	Α	51.4	D	77.1	В	63.6
2562	12 M00-3701	72.8	В	78.6	В	53.9	D	84.8	Α	63.9
2563	13 X00-1079	78.6	В	92.6	Α	51.2	D	77.4	В	63.5
2564	14 96229-3E39	60.5	С	45.0	Е	67.6	С	64.2	С	65.5
2565	15 961395-3E25	74.7	В	64.6	С	61.3	С	62.0	С	64.7
2566	16 B990081	67.9	С	73.6	В	65.3	С	69.0	С	65.2
2567	17 B990133	69.3	С	68.3	С	65.2	С	73.1	В	65.2
2568	18 B990399	77.2	В	70.0	С	73.6	В	62.8	С	66.2
2569	19 MSU Line D8006-R	72.3	В	72.3	В	55.2	D	67.7	С	64.0
2570	20 AR 850-1-1	80.2	Α	75.3	В	53.3	D	80.6	Α	63.8
2571	21 M01-4377	MODEL CONTRACTOR CONTRACTOR AND ADMINISTRATION OF THE ADMINISTRATI	С	65.3	С	70.4	В	65.2	С	65.8
2572	22 M01*1019	75.7	В	75.6	В	46.9	Е	81.1	Α	63.0
2573	23 Y00*3067	64.2	С	55.6	D	51.8	D	71.3	В	63.6
2574	24 X00-1056	74.5	В	76.3	В	56.7	D	83.5	Α	64.2
2575	25 93C-0004-22-1	78.1	В	80.3	Α	57.3	D	75,8	В	64.3
2576	26 97C-0232-2	557656000000000000000000000000000000000	C	66.0	С	63.1	С	72.3	В	65.0
2577	27 VA02W-398	78.1	В	79.6	В	44.0	Е	75.6	В	62.7 *
2578	28 VA02W-513	xx. 2020.702002 00000000000000000000000	D	23.3	F	64.1	С	58.5	D	65.1
2579	29 VA02W-555	ACCOUNT A DO NOT THE OWNER OF THE	С	56.6	D	53.9	D	66.5	С	63.9
2580	30 Nomad exp.	. A. A. A. Solitonio di la constituo generatgenen	В	22.6	F	60.8	С	27.5	F	64.7
2581	31 Samco exp.	CONTRACTOR CONTRACTOR CONTRACTOR	D	46.6	E	57.0	D	73.3	В	64.2
2582	32 Bingo exp.	outdouble be at action of the high appropriations	В	77.0	В	63.7	C	74.8	В	65.0
2583	33 97397J1-4-1-4-7	subcladud upagoda pad apod pada pada w	D	45.3	Ē	48.9	Ē	59.7	D	63.3
2584	34 97462A1-21-1-5-2	on a contract of the contraction of	D	61.6	С	54.5	D	62.2	С	63.9
2585	35 981312A1-6-2-2	la para de la	В	63.3	Č	49.6	Ē	77.2	В	63.3
2586	36 T148	and the committee of th	C	32.6	F	55.9	D	45.4	E	64.1
2587	37 OH776		B	63.6	Ċ	64:1	ō.	67.1	c	65.1
2588	38 OH768		В	76.0	В	51.9	D	69.9	С	63.6
2589	39 IL99-26442	with the contract of the contract of	В	63.6	Č	50.7	D	66.7	Č	63.5
2590	40 IL00-8061	*****	A	64.3	С	63.4	C	75.4	В	65.0
2591	41 G20412		c	A CONTRACTOR OF CONTRACTOR CONTRA	C	53.1	D	75.7	В	63.8
2592	42 G20536	The first of property of the property of the Artifact Art	В	73.3	В	55.5	D	72.8	В	64.0
2593	43 G20433		C .	anancan anat a anat a last tra	D.	68.6	C	72.6 79.4	В	65.6
		UU. I	•	99,0	~	UU.U	$\boldsymbol{v}$		יט	UU.U

# ADVANCED NURSERY EVALUATION FOR SOFT WHEAT MILLING AND BAKING QUALITY

LAB NO.	Samples composited from West Lafayette IN, Columbia MO, Blacksburg VA	FLOUR YIELD %		SOFT. EQUIV. %		FLOUR PROT. %		LACTIC ACID RET'N	COOKIE DIAM. CM.		TOP GR.
	STANDARD (#2552, FOSTER)	73.4		54.7		8.98		102.3	17.98		6
2551	1 Caldwell	72.5	*	57.7		8.68		112.0	18.31		5
2552	2 Foster	73.4		54.7		8.98		102.3	17.98		6
2553	3 Patton	70.6	Q	54.9		9.22		92.5	17.81	6000 TO 2000 1 8 000 8 000 1	4
2554	4 Roane	69.4	Q	56.5		8.82		108.3	17.14	Q	3
2555	5 MO980829	70.3	Q	55.4		8.28		103.2	18.31	3-7-8-55-	- 6
2556	6 T141	71.2	Q	38.7	Q	10.10	*	120.8	15.69	Q	1
2557	7 AR 93027-3-2	70.8	Q	58.6		8.25		114.0	17.96	.5400.80 page 	6
2558	8 MV 5-46	69.7	Q	55.5		8.58		95.7	17.71	*	2
2559	9 MSU Line E1007	71.6	Q	59.1		8.59		104,1	18.39		5
2560	10 IL99-15867	71.3	Q	58.4		8.50		117.5	18.22		3
2561	11 OH751	71.4	Q	56.5		8.55		100.9	18.36		5
2562	12 M00-3701	71.1	Q	59.1		8.28		115.0	18.14		4
2563	13 X00-1079	72.2	*	56.6		8.57		100.2	18.56		5
2564	14 96229-3E39	68.6	Q	52.0		9.50		129.7	17.13	Q	2
2565	15 961395-3E25	71.5	Q	51.2	*:	8.65		95.4	17.72		3
2566	16 B990081	70.1	Q	53.6		8.68		125.1	17.99		3
2567	17 B990133	70.4	Q	55.0		9.35		127.3	17.83		2
2568	18 B990399	72.0	*	51.5	*	8.66		103.3	17.88		3
2569	19 MSU Line D8006-R	71.0	Q	53.2		9.24		110.9	17.95		5
2570	20 AR 850-1-1	72.6	*	57.7		8.42		112.6	18.04		2
2571	21 M01-4377	69.3	Q	52.3		8.33		105.5	17.74	*	3
2572	22 M01*1019	71.7	Q	57.9		8.02		114.7	18.05		2
2573	23 Y00*3067	69.4	Q	54.4		8.00		110.3	17.45	Q	3
2574	24 X00-1056	71.4	Q	58.7	V W in the seco	7.82		124.8	18.07		3
2575	25 93C-0004-22-1	72.1	*	56.0		8,50		106.6	18.19		6
2576	26 97C-0232-2	69.9	Q	54.8		8.39		115.0	17.76		4
2577	27 VA02W-398	72.1	*	55.9		8.44		120.4	18.17		4
2578	28 VA02W-513	68.1	Q	50.0	*	9.35		118.4	16.48	Q	1
2579	29 VA02W-555	69.3	Q	52.8		8.58		109.6	17.48	Q	4
2580	30 Nomad exp.	72.1	*	39.1	Q	9.66	no. 5000 iosnos	92.5	16.46	Q	2
2581	31 Samco exp.	68.5	Q	55.1		9,96	*	114.7	17.18	Q	2
2582	32 Bingo exp.	71.9	*	55.7	00000000100001	8.52	. No.0655	77.5	18.09		4
2583	33 97397J1-4-1-4-7	67.1	Q	50.4	*	10.55	Q	96.3	17.14	Q	· 0
2584	34 97462A1-21-1-5-2	67.7	Q	51.3	*	9.46	noodona niinono	95.7	17.63	*	3
2585	35 981312A1-6-2-2	70.9	Q	56.5		8.74		94.4	17.68	*****	3
2586	36 T148	69.2	Q	45.4	Q	9.09		119.5	16.76	Q	. 2
2587	37 OH776	72.1	*	53.0		9,16		91.8	17.69	***************************************	3
2588	38 OH768	70.6	Q	54.0	cuitos mon	9.36	0000 000 000	98.3	18.06		3
2589	39 IL99-26442	72.3	*	52.8		8.32		110.5	17.69	Ostania († 2000) Santania († 2000)	4
2590	40 IL00-8061	73.2	508 <u>4</u> 0.839	55.9	c0808.00.00.00	8.69	000,00000000	116.9	17.71	*	3
2591	41 G20412	69.5	Q	56.0		8.74		107.0	17.59	*******	3
2592	42 G20536	70.8	Q	55.0	adada a etaa	8.21	.000/200/2007	112.5	17.98	- 50 - 50 - 50 - 51	4
2593	43 G20433	69.8	Q	57.3		8.44		93.2	17.55	*	2

.

REPRODUCE LOCALLY. Include form number and edition date on a	all reproductions.	ORM APPROVED - OMB No. 0581-0055				
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE  EXHIBIT E  STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).					
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME				
University of Georgia Research Foundation, Inc.	GA951395-3E25	USG 3295				
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (Include area code)				
627 Boyd Graduate Studies Research Center	(706) 542-1404	(706) 542-3837				
	7. PVPO NUMBER					
	#200	800005				
9. Is the applicant (individual or company) a U.S. national or a U.S.	based company? If no, give name of c	ountry. YES NO				
<ul> <li>a. If the original rights to variety were owned by individual(s), is YES</li> <li>b. If the original rights to variety were owned by a company(ies YES</li> </ul>	NO If no, give name of coun	sed company?				
11. Additional explanation on ownership ( <i>Trace ownership from origi</i> SEE ATTACHED.	inal breeder to current owner. Use the r	everse for extra space if needed):				
SEE ATTACHED.						
PLEASE NOTE:						
Plant variety protection can only be afforded to the owners (not licen	nsees) who meet the following criteria:					
<ol> <li>If the rights to the variety are owned by the original breeder, that p national of a country which affords similar protection to nationals of</li> </ol>						
<ol><li>If the rights to the variety are owned by the company which emplo nationals of a UPOV member country, or owned by nationals of a genus and species.</li></ol>	oyed the original breeder(s), the compan country which affords similar protection	y must be U.S. based, owned by to nationals of the U.S. for the same				
3, If the applicant is an owner who is not the original owner, both the	e original owner and the applicant must n	neet one of the above criteria.				
The original breeder/owner may be the individual or company who d	firected the final breeding. See Section	41(a)(2) of the Plant Variety Protection				

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of Information unless it displays a valid OMB control number. The valid OMB control number for this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provide and employer.

# EXHIBIT E UNIVERSITY OF GEORGIA RESEARCH FOUNDATION, INC. APPLICATION FOR 951395-3E25 ADDITIONAL EXPLANATION OF OWNERSHIP

The variety for which plant variety protection is hereby sought was developed by Jerry Johnson and G. David Buntin employees at The University of Georgia Agricultural Experiment Stations. The Georgia Agricultural Experiment Stations are a part of The University of Georgia. The University of Georgia is one of the universities of The University System of Georgia. The Board of Regents of the University System of Georgia ("Board of Regents") is a body that was created by the Constitution of the State of Georgia. The University of Georgia Research Foundation, Inc. is a Georgia nonprofit corporation. It was incorporated, among other things, to own and exploit intellectual property developed or created at The University of Georgia. On June 9, 1982 the Board of Regents approved a Patent Policy regarding inventions and discoveries by persons employed at The University of Georgia. As an employee at The University of Georgia Agricultural Experiment Stations, Jerry Johnson and G. David Buntin is subject to said Patent Policy. Rights in novel plant varieties developed at The University of Georgia, including 951395-3E25 are covered by said Patent Policy. By agreement, the Board of Regents assigned to The University of Georgia Research Foundation, Inc. all rights in intellectual property covered by said Patent Policy. This agreement applies to then existing intellectual property and to intellectual property which was developed thereafter.

Form Approved OMB NO 0581-0055
According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

> U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705

**EXHIBIT F DECLARATION REGARDING DEPOSIT** 

	DECLARATION REGARDING DEPOSIT					
NAME OF OWNER (S)	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country)	TEMPORARY OR EXPERIMENTAL DESIGNATION				
University of Georgia Research Foundation, Inc.	627 Boyd Graduate Studies Research Center	GA951395-3E25				
	Athens, GA 30602-7411	VARIETY NAME USG 3295				
NAME OF OWNER REPRESENTATIVE (S) Alisa Harkins Sohail Malik	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country) 627 Boyd Graduate Studies Research Center Athens, GA 30602-7411	PVPO NUMBER # 2 0 0 8 0 0 0 0 5				

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.